

# Methacrylic acid, pentadecyl ester

<b>Other names:</b>	pentadecyl methacrylate
<b>Inchi:</b>	InChI=1S/C19H36O2/c1-4-5-6-7-8-9-10-11-12-13-14-15-16-17-21-19(20)18(2)3/h2,4-17H
<b>InchiKey:</b>	YOTGRUGZMVCBLS-UHFFFAOYSA-N
<b>Formula:</b>	C19H36O2
<b>SMILES:</b>	<chem>C=C(C)C(=O)OCCCCCCCCCCCCCCC</chem>
<b>Mol. weight [g/mol]:</b>	296.49
<b>CAS:</b>	6140-74-5

## Physical Properties

Property code	Value	Unit	Source
gf	-45.53	kJ/mol	Joback Method
hf	-564.65	kJ/mol	Joback Method
hfus	45.16	kJ/mol	Joback Method
hvap	66.45	kJ/mol	Joback Method
log10ws	-6.49		Crippen Method
logp	6.197		Crippen Method
mcvol	281.710	ml/mol	McGowan Method
pc	1149.87	kPa	Joback Method
rinpol	2074.00		NIST Webbook
rinpol	2074.00		NIST Webbook
tb	706.97	K	Joback Method
tc	879.00	K	Joback Method
tf	360.33	K	Joback Method
vc	1.105	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	823.59	J/molxK	706.97	Joback Method
cpg	842.44	J/molxK	735.64	Joback Method
cpg	860.41	J/molxK	764.31	Joback Method
cpg	877.54	J/molxK	792.99	Joback Method
cpg	893.85	J/molxK	821.66	Joback Method
cpg	909.36	J/molxK	850.33	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C6140745&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C6140745&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mccvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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